

AMENDMENT AND RESPONSE

PAGE 2

Serial No.: 09/433,332

Filing Date: November 3, 1999

Attorney Docket No. 100.115US01

Title: DIGITAL RETURN PATH FOR HYBRID FIBER/COAX NETWORK

Revised.

at the physical layer as indicated next to blocks 302 and 304. Further, routing functionality, e.g., concentration and switching, is provided at the network layer as indicated by blocks 306 and 308. In this manner, the frequency turn-around scheme does not require modulation or demodulation processes and is kept transparent to the hardware at node 106.

IN THE CLAIMS

Please rewrite the claims as set forth below.

- Sub C1*
- A3*
10. (Amended) A hybrid fiber-coax network, comprising:
- a head end;
 - at least one optical distribution node coupled to the head end over at least one fiber optic link to provide upstream, digital data to the head end;
 - at least one coaxial cable link, coupled to the at least one optical distribution node, that receives the upstream, digital data from a plurality of modems;
 - wherein at least a portion of the upstream, digital data is transmitted over the at least one coaxial cable link on at least one modulated carrier below a frequency range for downstream transmission; and
 - wherein the at least one optical distribution node includes circuitry for retransmitting upstream, digital data back over the at least one coaxial cable link to detect collisions on the at least one coaxial cable link.

- Sub C1*
- OK*
13. (Amended) The network of claim 10, wherein the plurality of modems transmit collision detection signals on a different modulated carrier when a collision is detected based on signals from a frequency translator.